

Alternative Energy

Audience: Intermediate Educators (grades 5-8)

Engage in alternative energy hands-on activities that can be done in the classroom. Teachers will learn how to make biofuel from different plant sources. Also teachers, will explore ways to build a solar water heater and visit the Northeast Solar Energy Research Center (NSERC) facility.

Solar resources:

Renewables are Ready . A Guide to Teaching Renewable Energy in Junior and Senior High School Classrooms."

http://www.ucsusa.org/sites/default/files/legacy/assets/documents/clean_energy/renewablesready_fullreport.pdf

Energy Innovation at Brookhaven Lab (Info Sheet)

http://www.bnl.gov/bnlweb/pubaf/fact_sheet/pdf/FS_energy_sci.pdf

Energy Innovation (Electronic version of booklet given to participants.)

http://www.bnl.gov/bnlweb/pubaf/fact_sheet/pdf/brochure-BES.pdf

Northeast Solar Energy Research Center (Research Solar Array)

<http://www.bnl.gov/energy/NSERC/>

Soaking Up Sun at the Long Island Solar Farm Energy Research at Brookhaven National Lab (Article)

<http://intranet.bnl.gov/memo/news.php?a=23935>

Biofuels resources:

Biofuels from a Floating Water Weed : Duckweed sequencing reveals insights into genes for lignin, cellulose, and starch production.

<http://science.energy.gov/ber/highlights/2014/ber-2014-12-b/>

Harnessing the power of plants to fuel our future

<https://www.bnl.gov/energy/biofuels2.asp>

Video: DOE 6 New Things Happening with Biofuels

<http://energy.gov/articles/6-new-things-happening-biofuels-1>

Interactive BioFuel Quiz

<http://energy.gov/eere/bioenergy/maps/beto-quiz-interactive-content#>

DOE Energy Education

<http://energy.gov/science-innovation/science-education>

